

**ORDINANCE NO. 2014-03
SPEED LIMIT AND SCHOOL ZONE ON EL MAR LANE**

AN ORDINANCE AMENDING THE CODE OF THE CITY OF SEABROOK, CHAPTER 90 "TRAFFIC AND VEHICLES" ARTICLE II, "SPEED RESTRICTIONS", TO PROVIDE FOR NEW SPEED LIMITS ON EL MAR LANE, BY AMENDING SECTION 90-31, "ENUMERATION OF LIMITS," SUBSECTION (2) "EXCEPTIONS" ESTABLISHING A SPEED LIMIT OF 25 MILES PER HOUR FOR EL MAR LANE BETWEEN BAHAMA DRIVE AND NORTH MEYER AVE; SECTION 90-32 "SCHOOL ZONES" SUBSECTION "A," "TWENTY MILES PER HOUR DURING DESIGNATED TIMES," ESTABLISHING A SCHOOL ZONE AND SPEED OF 20 MILES PER HOUR ON THE PORTION OF EL MAR LANE FROM 200 FEET WEST OF THE CROSSWALK ADJACENT TO SCHOOL TO NORTH MEYER AVE, A DISTANCE OF APPROXIMATELY 750 FEET, FOR VEHICLES AS ESTABLISHED AND POSTED BY THE CITY OF SEABROOK; PROVIDING FOR A PENALTY IN AN AMOUNT OF NOT MORE THAN TWO HUNDRED DOLLARS (\$200.00) FOR VIOLATION OF ANY PROVISIONS HEREOF BY INCLUSION INTO THE CODE; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES INCONSISTENT OR IN CONFLICT HERewith; AND PROVIDING FOR SEVERABILITY.

WHEREAS, El Mar Lane is a city street within the corporate limits of the City of Seabrook; and

WHEREAS, heretofore previously, although not otherwise required by law, the City Engineer has, in accordance with the requirements of good engineering practices, made such investigations and studies as are appropriate and necessary to determine the adequacy of speed regulations in relation to specific locations of El Mar Lane and has rendered an opinion and evaluation as attached hereto and marked Exhibit "A" and incorporated by reference; and

WHEREAS, the City Engineer has recommended that the City of Seabrook City Council adopt this Ordinance setting speed limits as provided by the Manual of Uniform Traffic Control Devices published by the Texas Department of Transportation (TxDOT) by revising the posted speed limit on El Mar Lane, between Bahama Drive and North Meyer Ave, to 25 miles per hour, and additionally, creating a school zone and speed limit of 20 miles per hour from 200 feet west of the crosswalk adjacent to school to North Meyer Ave, a distance of approximately 750 feet, as described in Exhibit "A"; and

WHEREAS, the City Council of the City of Seabrook has determined the necessity for this Ordinance establishing the subject speed limit and creating a new school zone and speed limit by revising Sections 90-31 and 90-32, respectively for such purpose, providing for penalties for conviction for violation in

accordance therewith pursuant to the Code of Ordinances of the City of Seabrook (Code); and

WHEREAS, the City Council of the City of Seabrook has determined the necessity for this Ordinance in order to preserve the health, safety and well-being of the residents, citizens and inhabitants of the municipality;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SEABROOK, STATE OF TEXAS:

SECTION 1. FINDINGS OF FACT.

The facts and matters set forth in the preamble of this Ordinance are hereby found to be true and correct.

SECTION 2. AMENDMENT TO THE CODE.

The Seabrook City Code, Chapter 90 "Traffic and Vehicles", Article II. "Speed Restrictions", Section 90-32 "Enumeration of Limits," Subsection "(b)", "Exceptions," is hereby amended as follows:

"ARTICLE II. SPEED RESTRICTIONS

Sec. 90-31. Enumeration of Limits.

- (1) *Maximum speed limit established.* The maximum speed limit on any road, street, avenue, boulevard or highway within the city limits shall be 30 miles per hour, unless specifically excepted by this section.
- (2) *Exceptions.* Notwithstanding the provisions of subsection (a)[1] of this section, the maximum speed limits on the following roads, streets, boulevards and highways or portions of same, shall be as follows:

NASA Parkway (formerly NASA Road 1 or F.M. 528), for its entire length within the city, being from the western city limits to its intersection with State Highway 146, 45 miles per hour.

Red Bluff Road, from the west city limits to State Highway 146, a distance of approximately 0.90 mile, 45 miles per hour.

Red Bluff Road, from a point 400 feet west of Park Drive to Todville Road, 35 miles per hour.

Repsdorph Road, for its entire length, a distance of 1.40 miles, 35 miles per hour.

SH 146 from the northern limits of the city to 1,367 feet north of Repsdorph Road, a distance of approximately 1.369 miles, 50 miles per hour.

SH 146 from 1,367 feet north of Repsdorph Road to the centerline of Third Street, a distance of approximately 1.000 mile, 35 miles per hour.

SH 146 from the centerline of Third Street to the southern limits of the City of Seabrook, a distance of approximately 0.902 miles, 45 miles per hour.

Todville Road, from a point 600 feet north of East Meyer Avenue to the north city limits, a distance of 1.60 miles, 35 miles per hour.

El Mar Lane, between Bahama Drive and North Meyer Ave of 25 miles per hour."

SECTION 3. AMENDMENT TO THE CODE.

The Seabrook City Code, Chapter 90 "Traffic and Vehicles", Article II. "Speed Restrictions", Section 90-32 "School Zones" subsection "(a)", "Twenty miles per hour during designated times." is hereby amended as follows:

"ARTICLE II. SPEED RESTRICTIONS

Sec. 90-32. School zones.

- (a) *Twenty miles per hour during designated times.* The following streets and roads are hereby designated school zones, within which school zones it shall be unlawful to operate any motor vehicle at any speed in excess of 20 miles per hour, between the hours of 7:30 a.m. until 9:30 a.m. and from 2:45 p.m. until 4:45 p.m. on Monday, Tuesday, Wednesday, Thursday and Friday; provided, however, that such maximum speed limit shall not apply at other times of the day, or when school is not in session, at which other times the maximum speed limits shall be as provided elsewhere in this article:

- (1) Anders Street, from its intersection with Second Street, north to the property line of Bay Elementary School.

- (2) Cook Street, from its intersection with Second Street, north to the property line of Bay Elementary School.
 - (3) First Street, from its intersection with State Highway 146, east to its intersection with Cook Street.
 - (4) North Meyer Avenue, from its intersection with Second Street to its intersection with East Meyer Avenue.
 - (5) East Meyer Avenue, from its intersection with North Meyer Avenue east to its intersection with Todville Road.
 - (6) El Mar Lane, from 200 feet west of the crosswalk adjacent to school to North Meyer Ave, a distance of approximately 750 feet.
- (b) *Fifteen miles per hour during designated times.* The following streets and roads are hereby designated school zones, within which school zones it shall be unlawful to operate any motor vehicle at any speed in excess of 15 miles per hour, from 7:30 a.m. to 8:30 a.m. and from 3:00 p.m. to 4:00 p.m. on Monday, Tuesday, Wednesday, Thursday and Friday; provided, however, that such maximum speed limit shall not apply at other times of the day, or when school is not in session, at which other times the maximum speed limits shall be as provided elsewhere in this article:
- (1) Lakeside Drive from 25 feet north of Seward to 25 feet south of Humble, (with the actual school zone beginning 200 feet north of Humble Drive).
- (c) *Marking of school zones.* All the above listed school zones shall be clearly marked, so as to apprise motorists of the time and place of the restricted speed zones."

SECTION 4. PENALTY CLAUSE; INCLUSION INTO THE CODE.

This Ordinance is hereby incorporated into and made a part of the Seabrook City Code. Any person who shall violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not more than Two Hundred Dollars (\$200.00) per offense or the maximum amount permitted by law. Each violation shall constitute a separate offense.

SECTION 5. REPEAL OF CONFLICTING ORDINANCES.

All ordinances or parts of ordinances inconsistent or in conflict herewith are, to the extents of such inconsistency or conflict, hereby repealed.

SECTION 6. SEVERABILITY.

In the event any clause, phrase, provision, sentence, or any part of this Ordinance or the application of the same to any person or circumstances shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Seabrook, Texas, declares that it would have passed each and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, whether there be one or more parts.

SECTION 7. NOTICE BY PUBLICATION

The City Secretary shall give notice of the enactment of this Ordinance by promptly publishing it or its descriptive caption and penalty after final passage in the official newspaper of the City; the Ordinance to take effect upon publication and posting of signs in accordance with law.

SECTION 8. NOTICE BY ERECTION OF SIGNS/SIGNAL

This Ordinance shall become effective upon appropriate erection of speed zone signage to establish and provide additional notice of the establishment of the subject school zones speed limit during school-designated times as provided for herein.

PASSED AND APPROVED on first reading on this 4th day of February, 2014.

PASSED, APPROVED, AND ADOPTED on second and final reading on this 18th day of February 2014.

By:



Glenn Royal
Mayor

ATTEST:

By: Michele L. Glaser
Michele L. Glaser, TRMC
City Secretary

APPROVED AS TO FORM:

Steven L. Weathered
Steven L. Weathered
City Attorney



Cobb, Fendley & Associates, Inc.

TBPE Firm Registration No. 274 | TBPLS Firm Registration No. 100467

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Technical Memorandum

Date January 15, 2014

To City of Seabrook

From Brian Castille, PE

Subject El Mar Speed Analysis

Introduction

Cobb, Fendley & Associates, Inc. has been requested by the City of Seabrook to provide a technical memorandum to outline the findings from the speed analysis on El Mar Ln in between Bahama Dr and N Meyer Ave in Seabrook, Texas.

Existing Conditions

For the purpose of this memorandum, El Mar Ln is an east/west street with a posted speed limit of 20 miles per hour in between Bahama Dr and N Meyer Ave, which are north/south streets. El Mar Ln is two lanes in each direction separated by open ditch drainage. Pavement is Portland cement concrete with curb and gutter. The outside lane in both directions allows for on street parking. See **Figure 1** below.



Figure 1 – El Mar Ln (One Direction) in between Bahama Dr and Nassau Dr

Data Collection

Data collection was performed on December 3, 2013. It is attached to this memorandum.

Speed Analysis

According to the data collected, the 85th percentile speed on El Mar Ln in between Bahama Dr and Nassau Dr (in between Bahama Dr and N Meyer Ave) is 32 mph for eastbound and 33 mph for westbound.

According to Title 43, Part 1, Chapter 25, Subchapter B, Rule §25.23 (d), (5), (A) of the Texas Administrative Code,

"The posted speed selected is the nearest value ending in 5 or 0. The final speed limit may be lowered or raised by as much as 5 miles per hour from the 85th percentile speed or trial-run speed (performed if 125 cars cannot be checked during the two or four hour speed check) based on the professional judgment of the supervising engineer. Only under special conditions would the zone speed vary further from the 85th percentile. Explanations of such conditions follow."

Based on this, the posted speed limit on El Mar Ln would be 30 mph in both directions. However, according to page 3-19 of the TxDOT *Procedures for Establishing Speed Zones* Manual, the posted speed limit may be reduced by as much as 10 miles per hour below the 85th percentile speed due to the high driveway density along El Mar Ln. Therefore, the lowest speed limit allowable by staying within 10 mph of the 85th percentile speed would be 25 mph in both directions.

School Zone Speed Limit

According to Title 43, Part 1, Chapter 25, Subchapter B, Rule §25.23 of the Texas Administrative Code,

When the results of a speed study indicate an 85th percentile speed at or below 50 miles per hour, the reduced school speed limit should not be more than 15 miles per hour below the 85th percentile speed or normal posted speed limits.

Factual studies, reason, and sound engineering judgment should govern the final decision on the maximum deviation from the 85th percentile speed which will provide a reasonable and prudent speed limit.

In this case, the 85th percentile speeds are 32 mph and 33 mph for eastbound and westbound respectively. The lowest allowable school zone speed limit that stays within 15 mph of the 85th percentile speed would be 20 mph in both directions. This is also the existing school zone speed limit on N Meyer Ave.

Conclusion

Based on the analysis in this memorandum, the following would be allowed according to the Texas Administrative Code and TxDOT *Procedures for Establishing Speed Zones* Manual:

- Lowest allowable posted speed limit on El Mar Ln in between Bahama Dr and N Meyer Ave is 25 mph.
- Lowest allowable school zone speed on El Mar Ln in between Bahama Dr and N Meyer Ave is 20 mph, which is also the existing school zone speed limit on N Meyer Ave.

The limits for a school zone are determined using standards set forth in the 2011 edition of the Texas Manual on Uniform Traffic Control Devices (TMUTCD), the Texas Administrative Code and Engineering Judgment. **Figure 2** provides potential sign locations for a school zone along El Mar

Ln. The length of the school zone shown is from 200' west of the crosswalk adjacent to the school to N Meyer Ave. The total distance of the school zone shown is approximately 750' which is an acceptable length according to the Texas Administrative Code.

The 20 mph school zone speed limit shown is from 7:30am to 9:30am in the morning and 2:45pm to 4:45pm in the afternoon. These times shown are directly from the City of Seabrook as depicted in City Ordinance No. 2010-23 for Seabrook Intermediate School. If school operating times are adjusted, the school zone times shown on the "S4-1P" plaque would need to be adjusted in order to conform to the Texas Administrative Code.



Figure 2 – Potential Sign Locations on El Mar Ln

Sincerely,



Brian Castille, PE



RADAR MOTOR VEHICLE SPEED
Field Tally Sheet

Form 1882
(Rev. 02/12)

Date: 12/3/2013 County: Harris
Time (from): 9:00 AM (to): 3:00 PM
Surface Type: Concrete

Roadway: El Mar Lane Location: Between Bahama Drive and Nassau Drive
Weather: Clear
Surface Condition: Dry: Smooth:

AUTOMOBILES		
Direction:	West Bound	Total
mph		
>80		0
79		0
78		0
77		0
76		0
75		0
74		0
73		0
72		0
71		0
70		0
69		0
68		0
67		0
66		0
65		0
64		0
63		0
62		0
61		0
60		0
59		0
58		0
57		0
56		0
55		0
54		0
53		0
52		0
51		0
50		0
49		0
48		0
47		1
46		0
45		0
44		1
43		0
42		0
41		1
40		2
39		0
38		2
37		5
36		11
35		11
34		12
33		16
32		16
31		19
<30		212
TOTAL		309

85th Percentile Automobile
85th Percentile Speed(mph)

x 0.85
263
33

AUTOMOBILES		
Direction:		Total
mph		
>80		
79		
78		
77		
76		
75		
74		
73		
72		
71		
70		
69		
68		
67		
66		
65		
64		
63		
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44		
43		
42		
41		
40		
39		
38		
37		
36		
35		
34		
33		
32		
31		
<30		
TOTAL		

85th Percentile Automobile
85th Percentile Speed(km/h)

x 0.85

Ordinance No. 2014-03 Exhibit A

RADAR MOTOR VEHICLE SPEED

Field Tally Sheet

Form 1882
(Rev. 02/12)

Date: 12/3/2013 County: Harris
Time (from): 9:00 AM (to): 3:00 PM
Surface Type: Concrete

Roadway: El Mar Lane Location: Between Bahama Drive and Nassau Drive
Weather: Clear
Surface Condition: Dry: Smooth:

mph	AUTOMOBILES Direction: East Bound	Total
>80		0
79		0
78		0
77		0
76		0
75		0
74		0
73		0
72		0
71		0
70		0
69		0
68		0
67		0
66		0
65		0
64		0
63		0
62		0
61		0
60		0
59		0
58		0
57		0
56		0
55		0
54		0
53		0
52		1
51		0
50		0
49		0
48		0
47		1
46		0
45		0
44		0
43		0
42		0
41		0
40		1
39		0
38		5
37		5
36		2
35		7
34		6
33		15
32		18
31		19
<30		243
TOTAL		323

85th Percentile Automobile
85th Percentile Speed(mph) 32

mph	AUTOMOBILES Direction:	Total
>80		
79		
78		
77		
76		
75		
74		
73		
72		
71		
70		
69		
68		
67		
66		
65		
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43		
42		
41		
40		
39		
38		
37		
36		
35		
34		
33		
32		
31		
<30		
TOTAL		

85th Percentile Automobile
85th Percentile Speed(km/h)